Application No.: 09/974,929 **Docket No.: JCLA7503**

AMENDMENTS

In the Claims:

Please amend the claims according to the following listing of claims and substitute it for all prior versions and listings of claims in the application.

1. (currently amended) An apparatus for manufacturing a soot preform for an optical fiber by depositing glass particles generated through a flame hydrolysis reaction of raw material gases onto a starting rod being rotated and pulled up, the apparatus comprising:

a reaction chamber in which said glass particles are deposited over the starting rod to thereby render the starting rod into a soot preform;

an upper room located on top of said reaction chamber, for housing the soot preform being pulled up;

at least one core deposition burner disposed to open in the reaction chamber;

a horizontally extending slit made in that wall of the reaction chamber which is closest to said core deposition burner, at a location slightly underneath a ceiling of said reaction chamber, said slit being adapted to pass gas into the upper part of said reaction chamber; and

a gas exit made in that wall of the reaction chamber which is opposed to the wall having said slit.

2. (original) The apparatus of claim 1, further comprising at least one clad deposition burner.

3. (original) The apparatus of claim 1, wherein a horizontal length of said slit is at least 75% of the width of said reaction chamber as measured in parallel with said slit.

4. (original) The apparatus of claim 1, wherein said gas exit is substantially rectangular, and the distance between a top side of the gas exit and the ceiling of the reaction chamber is 50 mm or less.

5. (original) The apparatus of claim 1, wherein the horizontal length of said gas exit is at least 75% of the width of said reaction chamber as measured in parallel with said slit.

Claims 6-9. (canceled)

10. (original) The apparatus of claim 1, wherein said upper room is substantially cylindrical.

Claim 11. (canceled)

12. (original) The apparatus of claim 1, wherein the floor of said reaction chamber is formed with a raised floor having a height higher than the core deposition position, and the raised floor is formed at the foot of that wall of the reaction chamber which has the gas exit.

13. (original) The apparatus of claim 1, wherein said reaction chamber is divided by a horizontal partition into an upper reaction chamber having said slit and said gas exit and a lower reaction chamber, and a connect hole is made in the bottom of said upper reaction chamber for communicating the upper and lower reaction chambers with each other, and said lower reaction chamber has substantially no exhaust hole except this connect hole.

14. (original) The apparatus of claim 13, wherein said connect hole is a circle in shape having a radius which is 45-55 mm greater than the radius of that part of the soot preform, which is concentrically passing through said connect hole.

15. (canceled)

16. (original) The apparatus of claim 14, wherein a core deposition burner is installed at the lower reaction chamber and a clad deposition burner is installed at the upper reaction chamber.

17. (canceled)

18. (original) The apparatus of claim 16, further comprising a core heating burner installed at the lower reaction chamber.

19. (canceled)

20. (new) The apparatus of claim 1, wherein said gas exit is made in the wall of the upper part of the reaction chamber.

21. (new) The apparatus of claim 1, wherein said slit is substantially rectangular, and is about 480 mm in length and about 15 mm in width.

22. (new) The apparatus of claim 4, wherein said gas exit is about 480 mm in length and about 200 mm in width.